

We claim:

1. A heat transfer element comprising a high heat transfer medium, wherein the high heat transfer medium is formed by dissolving the following compounds in water to produce a mixture, and drying the resulting mixture to produce said heat transfer medium product with said compounds in the following weight percentages:

- (1) Cobaltic Oxide (Co_2O_3), 0.5-1.0 %;
- (2) Boron Oxide (B_2O_3), 1.0-2.0 %;
- (3) Calcium Dichromate (CaCr_2O_7), 1.0-2.0 %;
- (4) Magnesium Dichromate ($\text{MgCr}_2\text{O}_7 \cdot 6\text{H}_2\text{O}$), 10.0-20.0 %;
- (5) Potassium Dichromate ($\text{K}_2\text{Cr}_2\text{O}_7$), 40.0-80.0 %;
- (6) Sodium Dichromate ($\text{Na}_2\text{Cr}_2\text{O}_7$), 10.0-20.0 %;
- (7) Beryllium Oxide (BeO), 0.05-0.10 %;
- (8) Titanium Diboride (TiB_2), 0.5-1.0 %;
- (9) Potassium Peroxide (K_2O_2), 0.05-0.10 %;
- (10) A selected metal or Ammonium Dichromate (MCr_2O_7), 5.0-10.0 %; where "M" is selected from the group consisting of potassium, sodium, silver, and ammonium;
- (11) Strontium Chromate (SrCrO_4), 0.5-1.0 %; and
- (12) Silver Dichromate ($\text{Ag}_2\text{Cr}_2\text{O}_7$), 0.5%-1.0 %;

the heat transfer medium is positioned on a substrate.

2. A heat transfer element according to claim 1, wherein the weight percentages in the heat transfer product are:

- (1) Cobaltic Oxide (Co_2O_3), 0.7-0.8 %;
- (2) Boron Oxide (B_2O_3), 1.4-1.6 %;
- (3) Calcium Dichromate (CaCr_2O_7), 1.4-1.6 %;
- (4) Magnesium Dichromate ($\text{MgCr}_2\text{O}_7 \cdot 6\text{H}_2\text{O}$), 14.0-16.0 %;

- (5) Potassium Dichromate ($K_2Cr_2O_7$), 56.0-64.0 %;
- (6) Sodium Dichromate ($Na_2Cr_2O_7$), 14.0-16.0 %;
- (7) Beryllium Oxide (BeO), 0.07-0.08 %;
- (8) Titanium Diboride (TiB_2), 0.7-0.8 %;
- (9) Potassium Peroxide (K_2O_2), 0.07-0.08 %;
- (10) A selected metal or Ammonium Dichromate (MCr_2O_7), 7.0-8.0

%; where "M" is selected from the group consisting of potassium, sodium, silver, and ammonium;

- (11) Strontium Chromate ($SrCrO_4$), 0.7-0.8 %; and
- (12) Silver Dichromate ($Ag_2Cr_2O_7$), 0.7-0.8 %.

3. A heat transfer element according to claim 1, wherein the weight percentages in the heat transfer medium product are:

- (1) Cobaltic Oxide (Co_2O_3), 0.723 %;
- (2) Boron Oxide (B_2O_3), 1.4472 %;
- (3) Calcium Dichromate ($CaCr_2O_7$), 1.4472 %;
- (4) Magnesium Dichromate ($MgCr_2O_7 \cdot 6H_2O$), 14.472 %;
- (5) Potassium Dichromate ($K_2Cr_2O_7$), 57.888 %;
- Sodium Dichromate ($Na_2Cr_2O_7$), 14.472 %;
- Beryllium Oxide (BeO), 0.0723 %;
- (8) Titanium Diboride (TiB_2), 0.723 %;
- (9) Potassium Peroxide (K_2O_2), 0.0723 %;
- (10) (10) A selected metal or Ammonium Dichromate (MCr_2O_7),

7.23 %; where "M" is selected from the group consisting of potassium, sodium, silver, and ammonium;

- (11) Strontium Chromate ($SrCrO_4$), 0.723 %; and
- (12) Silver Dichromate ($Ag_2Cr_2O_7$), 0.723 %.

same
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4. A heat transfer element according to claim 1, wherein the heat transfer element is a heating element. *may be use claim*

5. A heat transfer element according to claim 1, wherein the heat transfer element is a heat-dissipating-element.

6. A heat transfer element according to according to claim 1, wherein the heat transfer element is a heat exchange element.

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Claims 1-283 were presented for examination at filing. On March 29, 2004, a Restriction Requirement was issued, setting out twenty-two groups of claims. In response, Applicants hereby elect Group I (claims 1-6), with traverse. Applicants point to the requirement in each of the remaining groups that the Group I surface be used. Withdrawal of the Requirement is requested.

Accordingly, Applicants believe that, in light of the election presented herein, claims 1-6 are presently under consideration. Applicants expressly reserve their right under 35 U.S.C. § 121 to file one or more divisional applications directed to the non-elected subject matter during the pendency of this application, or an application claiming priority from this application in the event that the Requirement is not withdrawn.

Applicants respectfully request examination of the elected subject matter on the merits.

In the unlikely event that the transmittal form is separated from this document and the Patent Office determines that an extension and/or other relief is required, Applicant petitions for any required relief including extensions of time and authorize the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 03-1952 referencing 458172000300. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

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We claim:

1. A heat transfer element comprising a high heat transfer medium, wherein the high heat transfer medium is formed by dissolving the following compounds in water to produce a mixture, and drying the resulting mixture to produce said heat transfer medium product with said compounds in the following weight percentages:

- (1) Cobaltic Oxide (Co_2O_3), 0.5-1.0 %; ✓
 - (2) Boron Oxide (B_2O_3), 1.0-2.0 %; ✓
 - (3) Calcium Dichromate (CaCr_2O_7), 1.0-2.0 %; ✓
 - (4) Magnesium Dichromate ($\text{MgCr}_2\text{O}_7 \cdot 6\text{H}_2\text{O}$), 10.0-20.0 %; ✓
 - (5) Potassium Dichromate ($\text{K}_2\text{Cr}_2\text{O}_7$), 40.0-80.0 %; ✓
 - (6) Sodium Dichromate ($\text{Na}_2\text{Cr}_2\text{O}_7$), 10.0-20.0 %; ✓
 - (7) Beryllium Oxide (BeO), 0.05-0.10 %; ✓
 - (8) Titanium Diboride (TiB_2), 0.5-1.0 %; ✓
 - (9) Potassium Peroxide (K_2O_2), 0.05-0.10 %; ✓
 - (10) A selected metal or Ammonium Dichromate (MCr_2O_7), 5.0-10.0 %; where "M" is selected from the group consisting of potassium, sodium, silver, and ammonium; ✓
 - (11) Strontium Chromate (SrCrO_4), 0.5-1.0 %; and ✓
 - (12) Silver Dichromate ($\text{Ag}_2\text{Cr}_2\text{O}_7$), 0.5%-1.0 %, ✓
- the heat transfer medium is positioned on a substrate.

2. A heat transfer element according to claim 1, wherein the weight percentages in the heat transfer product are:

- (1) Cobaltic Oxide (Co_2O_3), 0.7-0.8 %;
- (2) Boron Oxide (B_2O_3), 1.4-1.6 %;
- (3) Calcium Dichromate (CaCr_2O_7), 1.4-1.6 %;
- (4) Magnesium Dichromate ($\text{MgCr}_2\text{O}_7 \cdot 6\text{H}_2\text{O}$), 14.0-16.0 %;

7. A heat transfer element for use in heating of electronic or electric equipments which is characterized in that it comprises a high heat transfer medium, wherein the high heat transfer medium is formed by dissolving the following compounds in water to produce a mixture, and drying the resulting mixture to produce said heat transfer medium product with said compounds in the following weight percentages:

- (1) Cobaltic Oxide (Co_2O_3), 0.5-1.0 %;
- (2) Boron Oxide (B_2O_3), 1.0-2.0 %;
- (3) Calcium Dichromate (CaCr_2O_7), 1.0-2.0 %;
- (4) Magnesium Dichromate ($\text{MgCr}_2\text{O}_7 \cdot 6\text{H}_2\text{O}$), 10.0-20.0 %;
- (5) Potassium Dichromate ($\text{K}_2\text{Cr}_2\text{O}_7$), 40.0-80.0 %;
- (6) Sodium Dichromate ($\text{Na}_2\text{Cr}_2\text{O}_7$), 10.0-20.0 %;
- (7) Beryllium Oxide (BeO), 0.05-0.10 %;
- (8) Titanium Diboride (TiB_2), 0.5-1.0 %;
- (9) Potassium Peroxide (K_2O_2), 0.05-0.10 %;
- (10) A selected metal or Ammonium Dichromate (MCr_2O_7), 5.0-10.0 %; where "M" is selected from the group consisting of potassium, sodium, silver, and ammonium;
- (11) Strontium Chromate (SrCrO_4), 0.5-1.0 %; and
- (12) Silver Dichromate ($\text{Ag}_2\text{Cr}_2\text{O}_7$), 0.5-1.0 %.

8. A heat transfer element according to claim 7, wherein the heat transfer element is the heating element of a steam washing machine.

9. A heat transfer element according to claim 7, wherein the heat transfer element is the heating element of a heating system of a drying machine.

13. A heat transfer element for use in heating of daily necessities which is characterized in that it comprises a high heat transfer medium, wherein the high heat transfer medium is formed by dissolving the following compounds in water to produce a mixture, and drying the resulting mixture to produce said heat transfer medium product with said compounds in the following weight percentages:

- (1) Cobaltic Oxide (Co_2O_3), 0.5-1.0 %;
- (2) Boron Oxide (B_2O_3), 1.0-2.0 %;
- (3) Calcium Dichromate (CaCr_2O_7), 1.0-2.0 %;
- (4) Magnesium Dichromate ($\text{MgCr}_2\text{O}_7 \cdot 6\text{H}_2\text{O}$), 10.0-20.0 %;
- (5) Potassium Dichromate ($\text{K}_2\text{Cr}_2\text{O}_7$), 40.0-80.0 %;
- (6) Sodium Dichromate ($\text{Na}_2\text{Cr}_2\text{O}_7$), 10.0-20.0 %;
- (7) Beryllium Oxide (BeO), 0.05-0.10 %;
- (8) Titanium Diboride (TiB_2), 0.5-1.0 %;
- (9) Potassium Peroxide (K_2O_2), 0.05-0.10 %;
- (10) A selected metal or Ammonium Dichromate (MCr_2O_7), 5.0-10.0 %; where "M" is selected from the group consisting of potassium, sodium, silver, and ammonium;
- (11) Strontium Chromate (SrCrO_4), 0.5-1.0 %; and
- (12) Silver Dichromate ($\text{Ag}_2\text{Cr}_2\text{O}_7$), 0.5-1.0 %.

14. A heat transfer element according to claim 13, wherein the heat transfer element is the heating element of an electric water heater.

15. A heat transfer element according to claim 13, wherein the heat transfer element is the heating element of a radiator.

16. A heat transfer element according to claim 13, wherein the heat transfer element is the heating element of an electric heater.

22. A heat transfer element for use in heating of a mechanical processing apparatus which is characterized in that it comprises a high heat transfer medium, wherein the high heat transfer medium is formed by dissolving the following compounds in water to produce a mixture, and drying the resulting mixture to produce said heat transfer medium product with said compounds in the following weight percentages:

- (1) Cobaltic Oxide (Co_2O_3), 0.5-1.0 %;
- (2) Boron Oxide (B_2O_3), 1.0-2.0 %;
- (3) Calcium Dichromate (CaCr_2O_7), 1.0-2.0 %;
- (4) Magnesium Dichromate ($\text{MgCr}_2\text{O}_7 \cdot 6\text{H}_2\text{O}$), 10.0-20.0 %;
- (5) Potassium Dichromate ($\text{K}_2\text{Cr}_2\text{O}_7$), 40.0-80.0 %;
- (6) Sodium Dichromate ($\text{Na}_2\text{Cr}_2\text{O}_7$), 10.0-20.0 %;
- (7) Beryllium Oxide (BeO), 0.05-0.10 %;
- (8) Titanium Diboride (TiB_2), 0.5-1.0 %;
- (9) Potassium Peroxide (K_2O_2), 0.05-0.10 %;
- (10) A selected metal or Ammonium Dichromate (MCr_2O_7), 5.0-10.0 %; where "M" is selected from the group consisting of potassium, sodium, silver, and ammonium;
- (11) Strontium Chromate (SrCrO_4), 0.5-1.0 %; and
- (12) Silver Dichromate ($\text{Ag}_2\text{Cr}_2\text{O}_7$), 0.5-1.0 %.

23. A heat transfer element according to claim 22, wherein the heat transfer element is the heating element of a heat transfer rate injection molding screw rod.

24. A heat transfer element for use in heat recovery systems which is characterized in that it comprises a high heat transfer medium, wherein the high heat transfer medium is formed by dissolving the following compounds in water to produce a mixture, and drying the resulting mixture to produce said heat transfer medium product with said compounds in the following weight percentages:

- (1) Cobaltic Oxide (Co_2O_3), 0.5-1.0 %;
- (2) Boron Oxide (B_2O_3), 1.0-2.0 %;
- (3) Calcium Dichromate (CaCr_2O_7), 1.0-2.0 %;
- (4) Magnesium Dichromate ($\text{MgCr}_2\text{O}_7 \cdot 6\text{H}_2\text{O}$), 10.0-20.0 %;
- (5) Potassium Dichromate ($\text{K}_2\text{Cr}_2\text{O}_7$), 40.0-80.0 %;
- (6) Sodium Dichromate ($\text{Na}_2\text{Cr}_2\text{O}_7$), 10.0-20.0 %;
- (7) Beryllium Oxide (BeO), 0.05-0.10 %;
- (8) Titanium Diboride (TiB_2), 0.5-1.0 %;
- (9) Potassium Peroxide (K_2O_2), 0.05-0.10 %;
- (10) A selected metal or Ammonium Dichromate (MCr_2O_7), 5.0-10.0 %; where "M" is selected from the group consisting of potassium, sodium, silver, and ammonium;
- (11) Strontium Chromate (SrCrO_4), 0.5-1.0 %; and
- (12) Silver Dichromate ($\text{Ag}_2\text{Cr}_2\text{O}_7$), 0.5-1.0 %.

25. A heat transfer element according to claim 24, wherein the heat transfer element is the heating element of a high heat transfer rate air pre-heater.

26. A heat transfer element according to claim 24, wherein the heat transfer element is the heating element of a high heat transfer rate air pre-heater in a coke furnace.

90. A heat transfer element for use in heating of energy collecting systems which is characterized in that it comprises a high heat transfer medium, wherein the high heat transfer medium is formed by dissolving the following compounds in water to produce a mixture, and drying the resulting mixture to produce said heat transfer medium product with said compounds in the following weight percentages:

- (1) Cobaltic Oxide (Co_2O_3), 0.5-1.0 %;
- (2) Boron Oxide (B_2O_3), 1.0-2.0 %;
- (3) Calcium Dichromate (CaCr_2O_7), 1.0-2.0 %;
- (4) Magnesium Dichromate ($\text{MgCr}_2\text{O}_7 \cdot 6\text{H}_2\text{O}$), 10.0-20.0 %;
- (5) Potassium Dichromate ($\text{K}_2\text{Cr}_2\text{O}_7$), 40.0-80.0 %;
- (6) Sodium Dichromate ($\text{Na}_2\text{Cr}_2\text{O}_7$), 10.0-20.0 %;
- (7) Beryllium Oxide (BeO), 0.05-0.10 %;
- (8) Titanium Diboride (TiB_2), 0.5-1.0 %;
- (9) Potassium Peroxide (K_2O_2), 0.05-0.10 %;
- (10) A selected metal or Ammonium Dichromate (MCr_2O_7), 5.0-10.0 %; where "M" is selected from the group consisting of potassium, sodium, silver, and ammonium;
- (11) Strontium Chromate (SrCrO_4), 0.5-1.0 %; and
- (12) Silver Dichromate ($\text{Ag}_2\text{Cr}_2\text{O}_7$), 0.5-1.0 %.

91. A heat transfer element according to claim 90, wherein the heat transfer element is the heating element of a solar water heater.

92. A heat transfer element according to claim 90, wherein the heat transfer element is the heating element of a solar hot blast tool.

93. A heat transfer element according to claim 90, wherein the heat transfer element is the heating element of a solar energy collector tube.

106. A heat transfer element for use in heating of electronic or electric equipments which is characterized in that it comprises a high heat transfer medium, wherein the high heat transfer medium is formed by dissolving the following compounds in water to produce a mixture, and drying the resulting mixture to produce said heat transfer medium product with said compounds in the following weight percentages:

- (1) Cobaltic Oxide (Co_2O_3), 0.5-1.0 %;
- (2) Boron Oxide (B_2O_3), 1.0-2.0 %;
- (3) Calcium Dichromate (CaCr_2O_7), 1.0-2.0 %;
- (4) Magnesium Dichromate ($\text{MgCr}_2\text{O}_7 \cdot 6\text{H}_2\text{O}$), 10.0-20.0 %;
- (5) Potassium Dichromate ($\text{K}_2\text{Cr}_2\text{O}_7$), 40.0-80.0 %;
- (6) Sodium Dichromate ($\text{Na}_2\text{Cr}_2\text{O}_7$), 10.0-20.0 %;
- (7) Beryllium Oxide (BeO), 0.05-0.10 %;
- (8) Titanium Diboride (TiB_2), 0.5-1.0 %;
- (9) Potassium Peroxide (K_2O_2), 0.05-0.10 %;
- (10) A selected metal or Ammonium Dichromate (MCr_2O_7), 5.0-10.0 %; where "M" is selected from the group consisting of potassium, sodium, silver, and ammonium;
- (11) Strontium Chromate (SrCrO_4), 0.5-1.0 %; and
- (12) Silver Dichromate ($\text{Ag}_2\text{Cr}_2\text{O}_7$), 0.5-1.0 %.

107. A heat transfer element according to claim 106, wherein the heat transfer element is the heating element of a high heat transfer rate electric boiler air heater.

108. A heat transfer element according to claim 106, wherein the heat transfer element is the heating element of an electrothermal high heat transfer rate heating reactor.

115. A heat transfer element for use in heating of civil engineering facilities and structures which is characterized in that it comprises a high heat transfer medium, wherein the high heat transfer medium is formed by dissolving the following compounds in water to produce a mixture, and drying the resulting mixture to produce said heat transfer medium product with said compounds in the following weight percentages:

- (1) Cobaltic Oxide (Co_2O_3), 0.5-1.0 %;
- (2) Boron Oxide (B_2O_3), 1.0-2.0 %;
- (3) Calcium Dichromate (CaCr_2O_7), 1.0-2.0 %;
- (4) Magnesium Dichromate ($\text{MgCr}_2\text{O}_7 \cdot 6\text{H}_2\text{O}$), 10.0-20.0 %;
- (5) Potassium Dichromate ($\text{K}_2\text{Cr}_2\text{O}_7$), 40.0-80.0 %;
- (6) Sodium Dichromate ($\text{Na}_2\text{Cr}_2\text{O}_7$), 10.0-20.0 %;
- (7) Beryllium Oxide (BeO), 0.05-0.10 %;
- (8) Titanium Diboride (TiB_2), 0.5-1.0 %;
- (9) Potassium Peroxide (K_2O_2), 0.05-0.10 %;
- (10) A selected metal or Ammonium Dichromate (MCr_2O_7), 5.0-10.0 %; where "M" is selected from the group consisting of potassium, sodium, silver, and ammonium;
- (11) Strontium Chromate (SrCrO_4), 0.5-1.0 %; and
- (12) Silver Dichromate ($\text{Ag}_2\text{Cr}_2\text{O}_7$), 0.5-1.0 %.

116. A heat transfer element according to claim 115, wherein the heat transfer element is the heating element of a pavement heating system.

117. A heat transfer element according to claim 115, wherein the heat transfer element is the heating element of an airport runway heating system.

120. A heat transfer element for use in heating of drying apparatus which is characterized in that it comprises a high heat transfer medium, wherein the high heat transfer medium is formed by dissolving the following compounds in water to produce a mixture, and drying the resulting mixture to produce said heat transfer medium product with said compounds in the following weight percentages:

- (1) Cobaltic Oxide (Co_2O_3), 0.5-1.0 %;
- (2) Boron Oxide (B_2O_3), 1.0-2.0 %;
- (3) Calcium Dichromate (CaCr_2O_7), 1.0-2.0 %;
- (4) Magnesium Dichromate ($\text{MgCr}_2\text{O}_7 \cdot 6\text{H}_2\text{O}$), 10.0-20.0 %;
- (5) Potassium Dichromate ($\text{K}_2\text{Cr}_2\text{O}_7$), 40.0-80.0 %;
- (6) Sodium Dichromate ($\text{Na}_2\text{Cr}_2\text{O}_7$), 10.0-20.0 %;
- (7) Beryllium Oxide (BeO), 0.05-0.10 %;
- (8) Titanium Diboride (TiB_2), 0.5-1.0 %;
- (9) Potassium Peroxide (K_2O_2), 0.05-0.10 %;
- (10) A selected metal or Ammonium Dichromate (MCr_2O_7), 5.0-10.0 %; where "M" is selected from the group consisting of potassium, sodium, silver, and ammonium;
- (11) Strontium Chromate (SrCrO_4), 0.5-1.0 %; and
- (12) Silver Dichromate ($\text{Ag}_2\text{Cr}_2\text{O}_7$), 0.5-1.0 %.

121. A heat transfer element according to claim 120, wherein the heat transfer element is the heating element of an electric dryer.

122. A heat transfer element according to claim 120, wherein the heat transfer element is the heating element of an oil-firing hot air furnace.

123. A heat transfer element according to claim 120, wherein the heat transfer element is the heating element of a gas-firing hot air furnace.

131. A heat transfer element for use in heating of chemical engineering apparatus which is characterized in that it comprises a high heat transfer medium, wherein the high heat transfer medium is formed by dissolving the following compounds in water to produce a mixture, and drying the resulting mixture to produce said heat transfer medium product with said compounds in the following weight percentages:

- (1) Cobaltic Oxide (Co_2O_3), 0.5-1.0 %;
- (2) Boron Oxide (B_2O_3), 1.0-2.0 %;
- (3) Calcium Dichromate (CaCr_2O_7), 1.0-2.0 %;
- (4) Magnesium Dichromate ($\text{MgCr}_2\text{O}_7 \cdot 6\text{H}_2\text{O}$), 10.0-20.0 %;
- (5) Potassium Dichromate ($\text{K}_2\text{Cr}_2\text{O}_7$), 40.0-80.0 %;
- (6) Sodium Dichromate ($\text{Na}_2\text{Cr}_2\text{O}_7$), 10.0-20.0 %;
- (7) Beryllium Oxide (BeO), 0.05-0.10 %;
- (8) Titanium Diboride (TiB_2), 0.5-1.0 %;
- (9) Potassium Peroxide (K_2O_2), 0.05-0.10 %;
- (10) A selected metal or Ammonium Dichromate (MCr_2O_7), 5.0-10.0 %; where "M" is selected from the group consisting of potassium, sodium, silver, and ammonium;
- (11) Strontium Chromate (SrCrO_4), 0.5-1.0 %; and
- (12) Silver Dichromate ($\text{Ag}_2\text{Cr}_2\text{O}_7$), 0.5-1.0 %.

132. A heat transfer element according to claim 131, wherein the heat transfer element is the heating element of a crude oil heater.

133. A heat transfer element according to claim 131, wherein the heat transfer element is the heating element of an oil reservoir heater.

144. A heat transfer element for use in agriculture & fishery which is characterized in that it comprises a high heat transfer medium, wherein the high heat transfer medium is formed by dissolving the following compounds in water to produce a mixture, and drying the resulting mixture to produce said heat transfer medium product with said compounds in the following weight percentages:

- (1) Cobaltic Oxide (Co_2O_3), 0.5-1.0 %;
- (2) Boron Oxide (B_2O_3), 1.0-2.0 %;
- (3) Calcium Dichromate (CaCr_2O_7), 1.0-2.0 %;
- (4) Magnesium Dichromate ($\text{MgCr}_2\text{O}_7 \cdot 6\text{H}_2\text{O}$), 10.0-20.0 %;
- (5) Potassium Dichromate ($\text{K}_2\text{Cr}_2\text{O}_7$), 40.0-80.0 %;
- (6) Sodium Dichromate ($\text{Na}_2\text{Cr}_2\text{O}_7$), 10.0-20.0 %;
- (7) Beryllium Oxide (BeO), 0.05-0.10 %;
- (8) Titanium Diboride (TiB_2), 0.5-1.0 %;
- (9) Potassium Peroxide (K_2O_2), 0.05-0.10 %;
- (10) A selected metal or Ammonium Dichromate (MCr_2O_7), 5.0-10.0 %; where "M" is selected from the group consisting of potassium, sodium, silver, and ammonium;
- (11) Strontium Chromate (SrCrO_4), 0.5-1.0 %; and
- (12) Silver Dichromate ($\text{Ag}_2\text{Cr}_2\text{O}_7$), 0.5-1.0 %.

145. A heat transfer element according to claim 144, wherein the heat transfer element is the heat-dissipating element of a heat-dissipating apparatus preventing spontaneous ignition and heating.

146. A heat transfer element for use in computers and peripherals which is characterized in that it comprises a high heat transfer medium, wherein the high heat transfer medium is formed by dissolving the following compounds in water to produce a mixture, and drying the resulting mixture to produce said heat transfer medium product with said compounds in the following weight percentages:

- (1) Cobaltic Oxide (Co_2O_3), 0.5-1.0 %;
- (2) Boron Oxide (B_2O_3), 1.0-2.0 %;
- (3) Calcium Dichromate (CaCr_2O_7), 1.0-2.0 %;
- (4) Magnesium Dichromate ($\text{MgCr}_2\text{O}_7 \cdot 6\text{H}_2\text{O}$), 10.0-20.0 %;
- (5) Potassium Dichromate ($\text{K}_2\text{Cr}_2\text{O}_7$), 40.0-80.0 %;
- (6) Sodium Dichromate ($\text{Na}_2\text{Cr}_2\text{O}_7$), 10.0-20.0 %;
- (7) Beryllium Oxide (BeO), 0.05-0.10 %;
- (8) Titanium Diboride (TiB_2), 0.5-1.0 %;
- (9) Potassium Peroxide (K_2O_2), 0.05-0.10 %;
- (10) A selected metal or Ammonium Dichromate (MCr_2O_7), 5.0-10.0 %; where "M" is selected from the group consisting of potassium, sodium, silver, and ammonium;
- (11) Strontium Chromate (SrCrO_4), 0.5-1.0 %; and
- (12) Silver Dichromate ($\text{Ag}_2\text{Cr}_2\text{O}_7$), 0.5-1.0 %.

147. A heat transfer element according to claim 146, wherein the heat transfer element is the serpentine-shape heat-dissipating element of CPU coolers for desktop computers.

148. A heat transfer element according to claim 146, wherein the heat transfer element is the plate heat-dissipating element of CPU coolers for desktop computers.

158. A heat transfer element for use in heat dissipation in electronic or electric equipments which is characterized in that it comprises a high heat transfer medium, wherein the high heat transfer medium is formed by dissolving the following compounds in water to produce a mixture, and drying the resulting mixture to produce said heat transfer medium product with said compounds in the following weight percentages:

- (1) Cobaltic Oxide (Co_2O_3), 0.5-1.0 %;
- (2) Boron Oxide (B_2O_3), 1.0-2.0 %;
- (3) Calcium Dichromate (CaCr_2O_7), 1.0-2.0 %;
- (4) Magnesium Dichromate ($\text{MgCr}_2\text{O}_7 \cdot 6\text{H}_2\text{O}$), 10.0-20.0 %;
- (5) Potassium Dichromate ($\text{K}_2\text{Cr}_2\text{O}_7$), 40.0-80.0 %;
- (6) Sodium Dichromate ($\text{Na}_2\text{Cr}_2\text{O}_7$), 10.0-20.0 %;
- (7) Beryllium Oxide (BeO), 0.05-0.10 %;
- (8) Titanium Diboride (TiB_2), 0.5-1.0 %;
- (9) Potassium Peroxide (K_2O_2), 0.05-0.10 %;
- (10) A selected metal or Ammonium Dichromate (MCr_2O_7), 5.0-10.0 %; where "M" is selected from the group consisting of potassium, sodium, silver, and ammonium;
- (11) Strontium Chromate (SrCrO_4), 0.5-1.0 %; and
- (12) Silver Dichromate ($\text{Ag}_2\text{Cr}_2\text{O}_7$), 0.5-1.0 %.

159. A heat transfer element according to claim 158, wherein the heat transfer element is the heat-dissipating element of a top-mounted sealed radiator for electronic controllers.

160. A heat transfer element according to claim 158, wherein the heat transfer element is the heat-dissipating element of a wall-mounted sealed radiator for electronic controllers.

176. A heat transfer element for use in heat dissipation in medical treatment apparatus which is characterized in that it comprises a high heat transfer medium, wherein the high heat transfer medium is formed by dissolving the following compounds in water to produce a mixture, and drying the resulting mixture to produce said heat transfer medium product with said compounds in the following weight percentages:

- (1) Cobaltic Oxide (Co_2O_3), 0.5-1.0 %;
- (2) Boron Oxide (B_2O_3), 1.0-2.0 %;
- (3) Calcium Dichromate (CaCr_2O_7), 1.0-2.0 %;
- (4) Magnesium Dichromate ($\text{MgCr}_2\text{O}_7 \cdot 6\text{H}_2\text{O}$), 10.0-20.0 %;
- (5) Potassium Dichromate ($\text{K}_2\text{Cr}_2\text{O}_7$), 40.0-80.0 %;
- (6) Sodium Dichromate ($\text{Na}_2\text{Cr}_2\text{O}_7$), 10.0-20.0 %;
- (7) Beryllium Oxide (BeO), 0.05-0.10 %;
- (8) Titanium Diboride (TiB_2), 0.5-1.0 %;
- (9) Potassium Peroxide (K_2O_2), 0.05-0.10 %;
- (10) A selected metal or Ammonium Dichromate (MCr_2O_7), 5.0-10.0 %; where "M" is selected from the group consisting of potassium, sodium, silver, and ammonium;
- (11) Strontium Chromate (SrCrO_4), 0.5-1.0 %; and
- (12) Silver Dichromate ($\text{Ag}_2\text{Cr}_2\text{O}_7$), 0.5-1.0 %.

177. A heat transfer element according to claim 176, wherein the heat transfer element is the heat-dissipating element of an anti-dozing cold hat.

178. A heat transfer element according to claim 176, wherein the heat transfer element is the heat-dissipating element of a thermoelectric cooling beauty device.

179. A heat transfer element for use in heat dissipation in daily necessities which is characterized in that it comprises a high heat transfer medium, wherein the high heat transfer medium is formed by dissolving the following compounds in water to produce a mixture, and drying the resulting mixture to produce said heat transfer medium product with said compounds in the following weight percentages:

- (1) Cobaltic Oxide (Co_2O_3), 0.5-1.0 %;
- (2) Boron Oxide (B_2O_3), 1.0-2.0 %;
- (3) Calcium Dichromate (CaCr_2O_7), 1.0-2.0 %;
- (4) Magnesium Dichromate ($\text{MgCr}_2\text{O}_7 \cdot 6\text{H}_2\text{O}$), 10.0-20.0 %;
- (5) Potassium Dichromate ($\text{K}_2\text{Cr}_2\text{O}_7$), 40.0-80.0 %;
- (6) Sodium Dichromate ($\text{Na}_2\text{Cr}_2\text{O}_7$), 10.0-20.0 %;
- (7) Beryllium Oxide (BeO), 0.05-0.10 %;
- (8) Titanium Diboride (TiB_2), 0.5-1.0 %;
- (9) Potassium Peroxide (K_2O_2), 0.05-0.10 %;
- (10) A selected metal or Ammonium Dichromate (MCr_2O_7), 5.0-10.0 %; where "M" is selected from the group consisting of potassium, sodium, silver, and ammonium;
- (11) Strontium Chromate (SrCrO_4), 0.5-1.0 %; and
- (12) Silver Dichromate ($\text{Ag}_2\text{Cr}_2\text{O}_7$), 0.5-1.0 %.

180. A heat transfer element according to claim 179, wherein the heat transfer element is the heat-dissipating element of a drink cooling stick.

181. A heat transfer element according to claim 179, wherein the heat transfer element is the heat-dissipating element of a cooling cup.

182. A heat transfer element according to claim 179, wherein the heat transfer element is the heat-dissipating element of a lamp radiator.

186. A heat transfer element for use in heat dissipation in mechanical processing apparatus which is characterized in that it comprises a high heat transfer medium, wherein the high heat transfer medium is formed by dissolving the following compounds in water to produce a mixture, and drying the resulting mixture to produce said heat transfer medium product with said compounds in the following weight percentages:

- (1) Cobaltic Oxide (Co_2O_3), 0.5-1.0 %;
- (2) Boron Oxide (B_2O_3), 1.0-2.0 %;
- (3) Calcium Dichromate (CaCr_2O_7), 1.0-2.0 %;
- (4) Magnesium Dichromate ($\text{MgCr}_2\text{O}_7 \cdot 6\text{H}_2\text{O}$), 10.0-20.0 %;
- (5) Potassium Dichromate ($\text{K}_2\text{Cr}_2\text{O}_7$), 40.0-80.0 %;
- (6) Sodium Dichromate ($\text{Na}_2\text{Cr}_2\text{O}_7$), 10.0-20.0 %;
- (7) Beryllium Oxide (BeO), 0.05-0.10 %;
- (8) Titanium Diboride (TiB_2), 0.5-1.0 %;
- (9) Potassium Peroxide (K_2O_2), 0.05-0.10 %;
- (10) A selected metal or Ammonium Dichromate (MCr_2O_7), 5.0-10.0 %; where "M" is selected from the group consisting of potassium, sodium, silver, and ammonium;
- (11) Strontium Chromate (SrCrO_4), 0.5-1.0 %; and
- (12) Silver Dichromate ($\text{Ag}_2\text{Cr}_2\text{O}_7$), 0.5-1.0 %.

187. A heat transfer element according to claim 186, wherein the heat transfer element is a machine center guiding track.

188. A heat transfer element according to claim 186, wherein the heat transfer element is a machine center main pivot.

194. A heat transfer element for use in heat dissipation in an audio-visual equipment which is characterized in that it comprises a high heat transfer medium, wherein the high heat transfer medium is formed by dissolving the following compounds in water to produce a mixture, and drying the resulting mixture to produce said heat transfer medium product with said compounds in the following weight percentages:

- (1) Cobaltic Oxide (Co_2O_3), 0.5-1.0 %;
- (2) Boron Oxide (B_2O_3), 1.0-2.0 %;
- (3) Calcium Dichromate (CaCr_2O_7), 1.0-2.0 %;
- (4) Magnesium Dichromate ($\text{MgCr}_2\text{O}_7 \cdot 6\text{H}_2\text{O}$), 10.0-20.0 %;
- (5) Potassium Dichromate ($\text{K}_2\text{Cr}_2\text{O}_7$), 40.0-80.0 %;
- (6) Sodium Dichromate ($\text{Na}_2\text{Cr}_2\text{O}_7$), 10.0-20.0 %;
- (7) Beryllium Oxide (BeO), 0.05-0.10 %;
- (8) Titanium Diboride (TiB_2), 0.5-1.0 %;
- (9) Potassium Peroxide (K_2O_2), 0.05-0.10 %;
- (10) A selected metal or Ammonium Dichromate (MCr_2O_7), 5.0-10.0 %; where "M" is selected from the group consisting of potassium, sodium, silver, and ammonium;
- (11) Strontium Chromate (SrCrO_4), 0.5-1.0 %; and
- (12) Silver Dichromate ($\text{Ag}_2\text{Cr}_2\text{O}_7$), 0.5-1.0 %.

195. A heat transfer element according to claim 194, wherein the heat transfer element is the heat-dissipating element of a sound reproducing output system.

196. A heat transfer element according to claim 195, wherein the heat transfer element is the heat-dissipating element of an output system.

200. A heat transfer element for use in heat dissipation in electric mechanical equipments which is characterized in that it comprises a high heat transfer medium, wherein the high heat transfer medium is formed by dissolving the following compounds in water to produce a mixture, and drying the resulting mixture to produce said heat transfer medium product with said compounds in the following weight percentages:

- (1) Cobaltic Oxide (Co_2O_3), 0.5-1.0 %;
- (2) Boron Oxide (B_2O_3), 1.0-2.0 %;
- (3) Calcium Dichromate (CaCr_2O_7), 1.0-2.0 %;
- (4) Magnesium Dichromate ($\text{MgCr}_2\text{O}_7 \cdot 6\text{H}_2\text{O}$), 10.0-20.0 %;
- (5) Potassium Dichromate ($\text{K}_2\text{Cr}_2\text{O}_7$), 40.0-80.0 %;
- (6) Sodium Dichromate ($\text{Na}_2\text{Cr}_2\text{O}_7$), 10.0-20.0 %;
- (7) Beryllium Oxide (BeO), 0.05-0.10 %;
- (8) Titanium Diboride (TiB_2), 0.5-1.0 %;
- (9) Potassium Peroxide (K_2O_2), 0.05-0.10 %;
- (10) A selected metal or Ammonium Dichromate (MCr_2O_7), 5.0-10.0 %; where "M" is selected from the group consisting of potassium, sodium, silver, and ammonium;
- (11) Strontium Chromate (SrCrO_4), 0.5-1.0 %; and
- (12) Silver Dichromate ($\text{Ag}_2\text{Cr}_2\text{O}_7$), 0.5-1.0 %.

201. A heat transfer element according to claim 200, wherein the heat transfer element is the heat-dissipating element of an exhaust stream condenser of a power plant boiler.

202. A heat transfer element according to claim 200, wherein the heat transfer element is the heat-dissipating element of a transformer radiator.

229. A heat transfer element for use in heat dissipation in civil engineering facilities and structures which is characterized in that it comprises a high heat transfer medium, wherein the high heat transfer medium is formed by dissolving the following compounds in water to produce a mixture, and drying the resulting mixture to produce said heat transfer medium product with said compounds in the following weight percentages:

- (1) Cobaltic Oxide (Co_2O_3), 0.5-1.0 %;
- (2) Boron Oxide (B_2O_3), 1.0-2.0 %;
- (3) Calcium Dichromate (CaCr_2O_7), 1.0-2.0 %;
- (4) Magnesium Dichromate ($\text{MgCr}_2\text{O}_7 \cdot 6\text{H}_2\text{O}$), 10.0-20.0 %;
- (5) Potassium Dichromate ($\text{K}_2\text{Cr}_2\text{O}_7$), 40.0-80.0 %;
- (6) Sodium Dichromate ($\text{Na}_2\text{Cr}_2\text{O}_7$), 10.0-20.0 %;
- (7) Beryllium Oxide (BeO), 0.05-0.10 %;
- (8) Titanium Diboride (TiB_2), 0.5-1.0 %;
- (9) Potassium Peroxide (K_2O_2), 0.05-0.10 %;
- (10) A selected metal or Ammonium Dichromate (MCr_2O_7), 5.0-10.0 %; where "M" is selected from the group consisting of potassium, sodium, silver, and ammonium;
- (11) Strontium Chromate (SrCrO_4), 0.5-1.0 %; and
- (12) Silver Dichromate ($\text{Ag}_2\text{Cr}_2\text{O}_7$), 0.5-1.0 %.

230. A heat transfer element according to claim 229, wherein the heat transfer element is a furnace arc hanger of a boiler.

231. A heat transfer element for use in heat dissipation in chemical engineering apparatus which is characterized in that it comprises a high heat transfer medium, wherein the high heat transfer medium is formed by dissolving the following compounds in water to produce a mixture, and drying the resulting mixture to produce said heat transfer medium product with said compounds in the following weight percentages:

- (1) Cobaltic Oxide (Co_2O_3), 0.5-1.0 %;
- (2) Boron Oxide (B_2O_3), 1.0-2.0 %;
- (3) Calcium Dichromate (CaCr_2O_7), 1.0-2.0 %;
- (4) Magnesium Dichromate ($\text{MgCr}_2\text{O}_7 \cdot 6\text{H}_2\text{O}$), 10.0-20.0 %;
- (5) Potassium Dichromate ($\text{K}_2\text{Cr}_2\text{O}_7$), 40.0-80.0 %;
- (6) Sodium Dichromate ($\text{Na}_2\text{Cr}_2\text{O}_7$), 10.0-20.0 %;
- (7) Beryllium Oxide (BeO), 0.05-0.10 %;
- (8) Titanium Diboride (TiB_2), 0.5-1.0 %;
- (9) Potassium Peroxide (K_2O_2), 0.05-0.10 %;
- (10) A selected metal or Ammonium Dichromate (MCr_2O_7), 5.0-10.0 %; where "M" is selected from the group consisting of potassium, sodium, silver, and ammonium;
- (11) Strontium Chromate (SrCrO_4), 0.5-1.0 %; and
- (12) Silver Dichromate ($\text{Ag}_2\text{Cr}_2\text{O}_7$), 0.5-1.0 %.

232. A heat transfer element according to claim 231, wherein the heat transfer element is the heat-dissipating element of an oil tank cooler.

233. A heat transfer element according to claim 231, wherein the heat transfer element is the heat-dissipating element of a plate radiator.

235. A heat transfer element for use in heat exchange in agriculture & fishery systems which is characterized in that it comprises a high heat transfer medium, wherein the high heat transfer medium is formed by dissolving the following compounds in water to produce a mixture, and drying the resulting mixture to produce said heat transfer medium product with said compounds in the following weight percentages:

- (1) Cobaltic Oxide (Co_2O_3), 0.5-1.0 %;
- (2) Boron Oxide (B_2O_3), 1.0-2.0 %;
- (3) Calcium Dichromate (CaCr_2O_7), 1.0-2.0 %;
- (4) Magnesium Dichromate ($\text{MgCr}_2\text{O}_7 \cdot 6\text{H}_2\text{O}$), 10.0-20.0 %;
- (5) Potassium Dichromate ($\text{K}_2\text{Cr}_2\text{O}_7$), 40.0-80.0 %;
- (6) Sodium Dichromate ($\text{Na}_2\text{Cr}_2\text{O}_7$), 10.0-20.0 %;
- (7) Beryllium Oxide (BeO), 0.05-0.10 %;
- (8) Titanium Diboride (TiB_2), 0.5-1.0 %;
- (9) Potassium Peroxide (K_2O_2), 0.05-0.10 %;
- (10) A selected metal or Ammonium Dichromate (MCr_2O_7), 5.0-10.0 %; where "M" is selected from the group consisting of potassium, sodium, silver, and ammonium;
- (11) Strontium Chromate (SrCrO_4), 0.5-1.0 %; and
- (12) Silver Dichromate ($\text{Ag}_2\text{Cr}_2\text{O}_7$), 0.5-1.0 %.

236. A heat transfer element according to claim 235, wherein the heat transfer element is the heat exchange element of a heat circulation system.

237. A heat transfer element according to claim 235, wherein the heat transfer element is the heat exchange element of a heat transfer apparatus for keeping the room temperature constant.

238. A heat transfer element according to claim 235, wherein the heat transfer element is the heat exchange element of a geothermal collection system.

239. A heat transfer element according to claim 235, wherein the heat transfer element is the heat exchange element of agricultural plastic canopies.

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240. A heat transfer element for use in heat exchange in medical treatment apparatus which is characterized in that it comprises a high heat transfer medium, wherein the high heat transfer medium is formed by dissolving the following compounds in water to produce a mixture, and drying the resulting mixture to produce said heat transfer medium product with said compounds in the following weight percentages:

- (1) Cobaltic Oxide (Co_2O_3), 0.5-1.0 %;
- (2) Boron Oxide (B_2O_3), 1.0-2.0 %;
- (3) Calcium Dichromate (CaCr_2O_7), 1.0-2.0 %;
- (4) Magnesium Dichromate ($\text{MgCr}_2\text{O}_7 \cdot 6\text{H}_2\text{O}$), 10.0-20.0 %;
- (5) Potassium Dichromate ($\text{K}_2\text{Cr}_2\text{O}_7$), 40.0-80.0 %;
- (6) Sodium Dichromate ($\text{Na}_2\text{Cr}_2\text{O}_7$), 10.0-20.0 %;
- (7) Beryllium Oxide (BeO), 0.05-0.10 %;
- (8) Titanium Diboride (TiB_2), 0.5-1.0 %;
- (9) Potassium Peroxide (K_2O_2), 0.05-0.10 %;
- (10) A selected metal or Ammonium Dichromate (MCr_2O_7), 5.0-10.0 %; where "M" is selected from the group consisting of potassium, sodium, silver, and ammonium;
- (11) Strontium Chromate (SrCrO_4), 0.5-1.0 %; and
- (12) Silver Dichromate ($\text{Ag}_2\text{Cr}_2\text{O}_7$), 0.5-1.0 %.

241. A heat transfer element according to claim 240, wherein the heat transfer element is the heating or heat-dissipating element of an acupuncture instrument.

242. A heat transfer element for use in heat exchange in electric mechanical equipments which is characterized in that it comprises a high heat transfer medium, wherein the high heat transfer medium is formed by dissolving the following compounds in water to produce a mixture, and drying the resulting mixture to produce said heat transfer medium product with said compounds in the following weight percentages:

- (1) Cobaltic Oxide (Co_2O_3), 0.5-1.0 %;
- (2) Boron Oxide (B_2O_3), 1.0-2.0 %;
- (3) Calcium Dichromate (CaCr_2O_7), 1.0-2.0 %;
- (4) Magnesium Dichromate ($\text{MgCr}_2\text{O}_7 \cdot 6\text{H}_2\text{O}$), 10.0-20.0 %;
- (5) Potassium Dichromate ($\text{K}_2\text{Cr}_2\text{O}_7$), 40.0-80.0 %;
- (6) Sodium Dichromate ($\text{Na}_2\text{Cr}_2\text{O}_7$), 10.0-20.0 %;
- (7) Beryllium Oxide (BeO), 0.05-0.10 %;
- (8) Titanium Diboride (TiB_2), 0.5-1.0 %;
- (9) Potassium Peroxide (K_2O_2), 0.05-0.10 %;
- (10) A selected metal or Ammonium Dichromate (MCr_2O_7), 5.0-10.0 %; where "M" is selected from the group consisting of potassium, sodium, silver, and ammonium;
- (11) Strontium Chromate (SrCrO_4), 0.5-1.0 %; and
- (12) Silver Dichromate ($\text{Ag}_2\text{Cr}_2\text{O}_7$), 0.5-1.0 %.

243. A heat transfer element according to claim 242, wherein the heat transfer element is the heat exchange element of a target furnace.

244. A heat transfer element according to claim 242, wherein the heat transfer element is the heat exchange element of an industrial exhaust recycling apparatus.

246. A heat transfer element for use in heat exchange in a thermostatic equipment which is characterized in that it comprises a high heat transfer medium, wherein the high heat transfer medium is formed by dissolving the following compounds in water to produce a mixture, and drying the resulting mixture to produce said heat transfer medium product with said compounds in the following weight percentages:

- (1) Cobaltic Oxide (Co_2O_3), 0.5-1.0 %;
- (2) Boron Oxide (B_2O_3), 1.0-2.0 %;
- (3) Calcium Dichromate (CaCr_2O_7), 1.0-2.0 %;
- (4) Magnesium Dichromate ($\text{MgCr}_2\text{O}_7 \cdot 6\text{H}_2\text{O}$), 10.0-20.0 %;
- (5) Potassium Dichromate ($\text{K}_2\text{Cr}_2\text{O}_7$), 40.0-80.0 %;
- (6) Sodium Dichromate ($\text{Na}_2\text{Cr}_2\text{O}_7$), 10.0-20.0 %;
- (7) Beryllium Oxide (BeO), 0.05-0.10 %;
- (8) Titanium Diboride (TiB_2), 0.5-1.0 %;
- (9) Potassium Peroxide (K_2O_2), 0.05-0.10 %;
- (10) A selected metal or Ammonium Dichromate (MCr_2O_7), 5.0-10.0 %; where "M" is selected from the group consisting of potassium, sodium, silver, and ammonium;
- (11) Strontium Chromate (SrCrO_4), 0.5-1.0 %; and
- (12) Silver Dichromate ($\text{Ag}_2\text{Cr}_2\text{O}_7$), 0.5-1.0 %.

247. A heat transfer element according to claim 246, wherein the heat transfer element is the heat exchange element of an artificial crystal cultivation thermostatic box.

248. A heat transfer element according to claim 246, wherein the heat transfer element is the heat exchange element of a ventilation system.

267. A heat transfer element for use in heat exchange in chemical engineering equipments which is characterized in that it comprises a high heat transfer medium, wherein the high heat transfer medium is formed by dissolving the following compounds in water to produce a mixture, and drying the resulting mixture to produce said heat transfer medium product with said compounds in the following weight percentages:

- (1) Cobaltic Oxide (Co_2O_3), 0.5-1.0 %;
- (2) Boron Oxide (B_2O_3), 1.0-2.0 %;
- (3) Calcium Dichromate (CaCr_2O_7), 1.0-2.0 %;
- (4) Magnesium Dichromate ($\text{MgCr}_2\text{O}_7 \cdot 6\text{H}_2\text{O}$), 10.0-20.0 %;
- (5) Potassium Dichromate ($\text{K}_2\text{Cr}_2\text{O}_7$), 40.0-80.0 %;
- (6) Sodium Dichromate ($\text{Na}_2\text{Cr}_2\text{O}_7$), 10.0-20.0 %;
- (7) Beryllium Oxide (BeO), 0.05-0.10 %;
- (8) Titanium Diboride (TiB_2), 0.5-1.0 %;
- (9) Potassium Peroxide (K_2O_2), 0.05-0.10 %;
- (10) A selected metal or Ammonium Dichromate (MCr_2O_7), 5.0-10.0 %; where "M" is selected from the group consisting of potassium, sodium, silver, and ammonium;
- (11) Strontium Chromate (SrCrO_4), 0.5-1.0 %; and
- (12) Silver Dichromate ($\text{Ag}_2\text{Cr}_2\text{O}_7$), 0.5-1.0 %.

268. A heat transfer element according to claim 267, wherein the heat transfer element is the heat exchange element of a thermostatic apparatus for petroleum chemical equipments.

269. A heat transfer element according to claim 267, wherein the heat transfer element is the heat exchange element of a thermostatic cracking furnace.

270. A heat transfer element system for use in heating in agriculture and fishery cultivation systems which is characterized in that it comprises a high heat transfer medium, wherein the high heat transfer medium is formed by dissolving the following compounds in water to produce a mixture, and drying the resulting mixture to produce said heat transfer medium product with said compounds in the following weight percentages:

- (1) Cobaltic Oxide (Co_2O_3), 0.5-1.0 %;
- (2) Boron Oxide (B_2O_3), 1.0-2.0 %;
- (3) Calcium Dichromate (CaCr_2O_7), 1.0-2.0 %;
- (4) Magnesium Dichromate ($\text{MgCr}_2\text{O}_7 \cdot 6\text{H}_2\text{O}$), 10.0-20.0 %;
- (5) Potassium Dichromate ($\text{K}_2\text{Cr}_2\text{O}_7$), 40.0-80.0 %;
- (6) Sodium Dichromate ($\text{Na}_2\text{Cr}_2\text{O}_7$), 10.0-20.0 %;
- (7) Beryllium Oxide (BeO), 0.05-0.10 %;
- (8) Titanium Diboride (TiB_2), 0.5-1.0 %;
- (9) Potassium Peroxide (K_2O_2), 0.05-0.10 %;
- (10) A selected metal or Ammonium Dichromate (MCr_2O_7), 5.0-10.0 %; where "M" is selected from the group consisting of potassium, sodium, silver, and ammonium;
- (11) Strontium Chromate (SrCrO_4), 0.5-1.0 %; and
- (12) Silver Dichromate ($\text{Ag}_2\text{Cr}_2\text{O}_7$), 0.5-1.0 %.

271. A heat transfer element system according to claim 270, wherein the system comprises the heat transfer element for heating of a plant heating system.

272. A heat transfer element system according to claim 270, wherein the system comprises the heating element of the solar energy water heater in a plant heating system.

280. A heat transfer element system for use in heat exchange in electronic or electric equipments which is characterized in that it comprises a high heat transfer medium, wherein the high heat transfer medium is formed by dissolving the following compounds in water to produce a mixture, and drying the resulting mixture to produce said heat transfer medium product with said compounds in the following weight percentages:

- (1) Cobaltic Oxide (Co_2O_3), 0.5-1.0 %;
- (2) Boron Oxide (B_2O_3), 1.0-2.0 %;
- (3) Calcium Dichromate (CaCr_2O_7), 1.0-2.0 %;
- (4) Magnesium Dichromate ($\text{MgCr}_2\text{O}_7 \cdot 6\text{H}_2\text{O}$), 10.0-20.0 %;
- (5) Potassium Dichromate ($\text{K}_2\text{Cr}_2\text{O}_7$), 40.0-80.0 %;
- (6) Sodium Dichromate ($\text{Na}_2\text{Cr}_2\text{O}_7$), 10.0-20.0 %;
- (7) Beryllium Oxide (BeO), 0.05-0.10 %;
- (8) Titanium Diboride (TiB_2), 0.5-1.0 %;
- (9) Potassium Peroxide (K_2O_2), 0.05-0.10 %;
- (10) A selected metal or Ammonium Dichromate (MCr_2O_7), 5.0-10.0 %; where "M" is selected from the group consisting of potassium, sodium, silver, and ammonium;
- (11) Strontium Chromate (SrCrO_4), 0.5-1.0 %; and
- (12) Silver Dichromate ($\text{Ag}_2\text{Cr}_2\text{O}_7$), 0.5-1.0 %.

281. A heat transfer element system according to claim 280, wherein the system comprises the heat exchange element of a dehydrating apparatus.

282. A heat transfer element system for use in heat exchange in daily necessities which is characterized in that it comprises a high heat transfer medium, wherein the high heat transfer medium is formed by dissolving the following compounds in water to produce a mixture, and drying the resulting mixture to produce said heat transfer medium product with said compounds in the following weight percentages:

- (1) Cobaltic Oxide (Co_2O_3), 0.5-1.0 %;
- (2) Boron Oxide (B_2O_3), 1.0-2.0 %;
- (3) Calcium Dichromate (CaCr_2O_7), 1.0-2.0 %;
- (4) Magnesium Dichromate ($\text{MgCr}_2\text{O}_7 \cdot 6\text{H}_2\text{O}$), 10.0-20.0 %;
- (5) Potassium Dichromate ($\text{K}_2\text{Cr}_2\text{O}_7$), 40.0-80.0 %;
- (6) Sodium Dichromate ($\text{Na}_2\text{Cr}_2\text{O}_7$), 10.0-20.0 %;
- (7) Beryllium Oxide (BeO), 0.05-0.10 %;
- (8) Titanium Diboride (TiB_2), 0.5-1.0 %;
- (9) Potassium Peroxide (K_2O_2), 0.05-0.10 %;
- (10) A selected metal or Ammonium Dichromate (MCr_2O_7), 5.0-10.0 %; where "M" is selected from the group consisting of potassium, sodium, silver, and ammonium;
- (11) Strontium Chromate (SrCrO_4), 0.5-1.0 %; and
- (12) Silver Dichromate ($\text{Ag}_2\text{Cr}_2\text{O}_7$), 0.5-1.0 %.

283. A heat transfer element system according to claim 282, wherein the system is the heat exchange element of a geothermal energy refrigerating system.